Iowa Department of Public Health

Iowa

Rural and Agricultural

Health and Safety Resource Plan

2011

Iowa Department of Public Health

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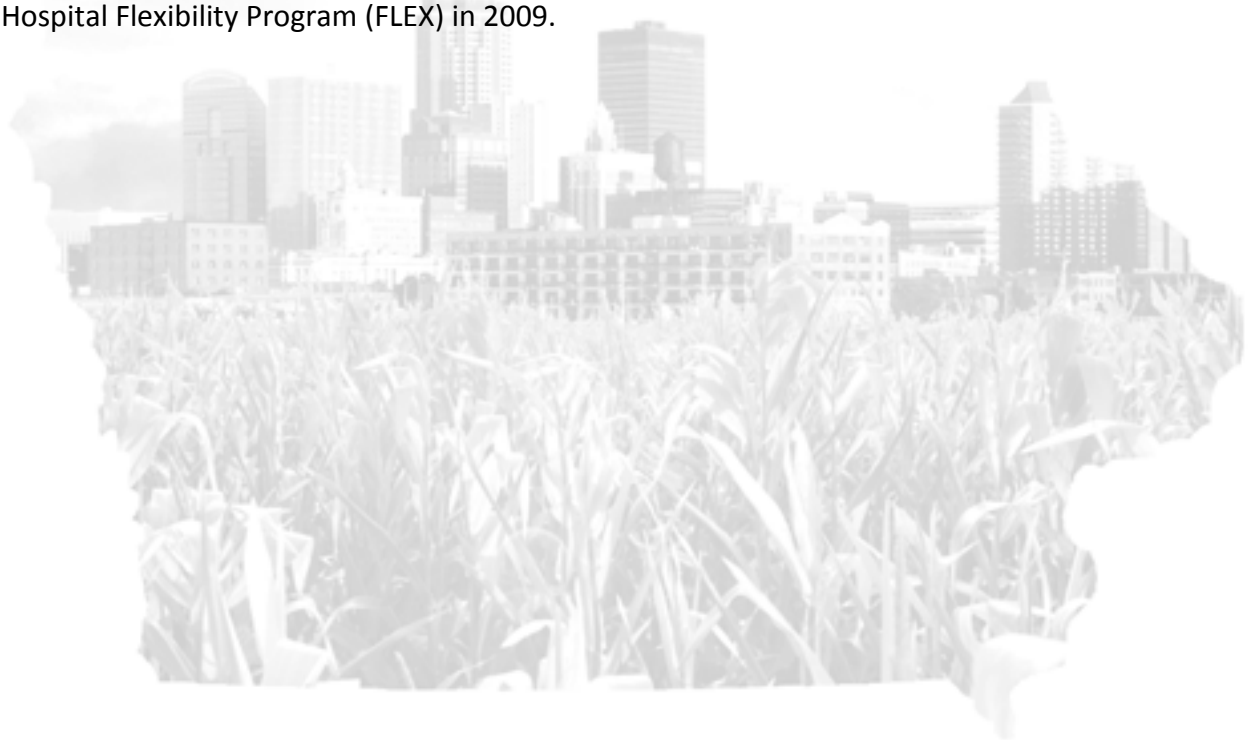
Foreword

The Iowa Department of Public Health (IDPH) convened the Health and Long-Term Care Advisory Council (HLTCAC) to assist in the development of its strategic plan. One component of the strategic plan is a rural health care resource plan. This document fulfills the rural health care resource plan requirements requested in Iowa Code 135.164.

Additionally, this document will: 1) Serve as an Iowa rural health resource to constituents, partners and stakeholders, and 2) fulfills the federal Office of Rural Health Policy requirement to update and revise the IA State Rural Health Report completed by the Iowa Medicare Rural Hospital Flexibility Program (FLEX) in 2009.



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ACKNOWLEDGEMENT

Assuring access, quality and affordable health care in rural Iowa is a high calling. Iowans are fortunate to have individuals and organizations with exemplary knowledge and expertise of rural and agricultural health issues. The Iowa Department of Public Health gratefully acknowledges the individuals who offered their valuable time, shared resources, and contributed to the research, development and review of this document. Also we recognize the Iowa Rural Health Association for hosting a series of webinars that focused on the topics presented in this document.

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TABLE OF CONTENTS

BACKGROUND

House File 2539 Health Care Reform Legislation passed during 2008 charged the Iowa Department of Public Health (IDPH) with coordinating public and private efforts to develop and maintain an appropriate health care delivery infrastructure and a stable, well-qualified, diverse and sustainable health care workforce in Iowa. To reach and sustain this goal, IDPH was charged to submit a strategic plan to the Governor and General Assembly. The department was also charged to convene a technical advisory committee to assist in the development of the strategic plan. The components for the strategic plan described in Iowa Code 135.164 include "A **rural health care resources plan** to assess the availability of health resources in rural areas of the state, assess the unmet needs of these communities, and evaluate how federal and state reimbursement policies can be modified, if necessary, to more efficiently and effectively meet the health care needs of rural communities. The plan considers the unique health care needs of rural communities, the adequacy of the rural health care workforce, and transportation needs for accessing appropriate care [1]. "

INTRODUCTION

The intent of this document is to present reliable information and data as a valuable resource for the officials, agencies, and organizations responsible for strengthening and supporting the rural health systems vital to 43 percent of Iowa residents. Due to the significance of agricultural safety and the contributions of Iowa's Center for Agricultural Safety and Health and other agricultural health and safety entities, this component of the strategic plan will be referred to as the **Rural and Agricultural Health and Safety Resource Plan (RAHSRP).** Also, this plan will integrate sections the 1998 Iowa Code Chapter 135.107 the code that address: rural health, agricultural safety, rural health clinics, workforce, and primary care [2].

To help fulfill the intent of Iowa Code 135.164, the RAHSRP will include traditional topics and current issues, and will reflect policies, programs and initiatives related to rural health and agricultural safety in Iowa. The RAHSRP will also align with the Iowa Department of Public Health Mission: *Promoting and protecting the health of Iowans* and several of the department's Guiding Principles.

Executive Summary

The development of this document included a survey of individuals in Iowa who have expertise and interest in rural health. The survey results helped to identify priority topic areas and concerns for rural and agricultural health and safety in Iowa. The Rural and Agricultural Health and Safety Resource Plan (RAHSRP), includes seven sections that focus on "rural". Each section is designed to reveal information, data, graphics, and resources at the national and state level. Most important, each section highlights "**in Iowa**" information, and promising practices which assist the reader to an understanding of the issues, challenges, complexities, and community victories associated with health, safety, and wellness in rural Iowa.

It is important to note development of the RAHSRP was a combined endeavor. Several individuals and organizations with valuable expertise and experience graciously offered guidance, direction, research, data, resources and the stories included in the document.

There are 62 million Americans currently residing in rural areas. It is estimated that 20 percent of the rural population is uninsured. While 20 percent of the U.S. population lives in rural areas only 9 percent of physicians practice in rural settings.

Iowa is the stereotypical rural environment. Agriculture and ag-related businesses make up the majority of the state's economic base. Iowa's rural populations have similar characteristics to other rural states in the nation: older populations, lower incomes, and seasonal unemployment above regional averages. Despite those characteristics, Iowa's rural populations demonstrate greater satisfaction with life, increased engagement and connectedness within their communities and, fewer impacts from impoverishment or unemployment because of community support systems.

What is rural and why is it important? Several demographic trends are reshaping economic and social conditions across nonmetro/rural counties. The trends serve as key indicators of rural health, and as generators of growth and economic expansion. The definition for rural depends on the topic and the issue it is related to, and the definition source. Geographic and census data are a tool to determine policy and funding. Although the word rural is commonly substituted for nonmetro in speech and writing, it is becoming increasingly misleading especially as related to health matters. Funding, programs and resources identified for rural communities need to stream into Iowa areas that have a rural environment and culture.

What about access to health care? There are numerous issues affecting access to health care in rural Iowa. Most of the barriers mirror the health care access challenges reported throughout the nation's rural areas. However since 90 percent of the land mass in Iowa is considered rural and in production agriculture, and half of the population live in what is considered a rural area, the issue of health care access is more evident in Iowa. Transportation and community development are two vitally important issues relating to health care access. To briefly summarize---rural areas that have public transportation systems, and economically effective, health conscious communities are more likely to have adequate access to quality health care.

There are numerous factors that contribute to why and how a person in rural Iowa might need health care, seek it out, receive quality care or---possibly not receive all the services required. The health care services components included in RAHSRP are: Clinics, dental/oral health, emergency medical services, hospitals, long term care, mental/behavioral health, pharmacy, and veterans' health care. Overall while there is high level of quality care services in rural Iowa, health care access for rural residents is not always equal to the services and costs available in urban areas.

How is the local public health agency involved? One of the most beneficial aspects of public health is; local health agencies have in-depth knowledge about their communities and traditionally maintain a high profile of involvement in matters that affect overall health. They are "in the trenches" and have close contact with residents. Local health agencies ability to approach the issues that determine good or bad health makes them an invaluable asset in health care reform provisions which address prevention and wellness. At the Iowa Department of Public Health, 32 of the local public health sub contracts are hospital based. In Iowa many rural hospitals interact with public health every day.

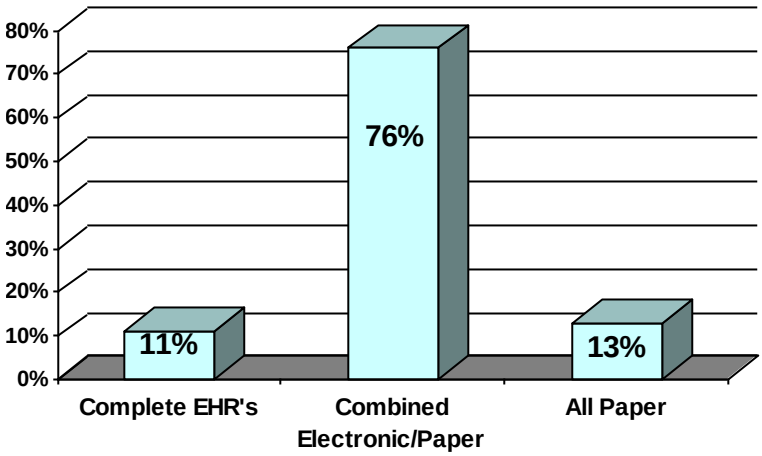
What about farmers and farm families? Agriculture is the most hazardous occupation in the U.S., as well as in Iowa, with an occupational fatality rate 6 times higher than the general working population. In Iowa, farmers make up about 37 percent of all occupational fatalities in the state, even though they only comprise 7 percent of the total workforce (farm workforce here does not include family member). The rural population can be divided into rural farm and rural non-farm sectors. There are about equal numbers in each sector. The farm sector has a unique set of occupational health and safety issues in addition to sharing the health and safety issues of the general rural population.

What are the health workforce implication for rural? The shortage of healthcare workers in rural communities is the greatest rural health issue today. While about 20 percent of the American population – approximately 62 million people – live in rural areas, only about nine percent of all physicians and 12 percent of all pharmacists practice in rural communities. Rural areas average about 30 dentists per 100,000 residents, while urban areas average approximately twice that number. Shortages of nurses (both registered nurses and licensed practical nurses) and allied health professionals also abound. Iowa rural health workforce reflects the national norm, however we rank lower for mental and behavioral health access than 46 other states.

What are the information technology implications for rural? Health information technology (HIT) has the potential to revolutionize the delivery of health care. In Iowa the "rural factor" related to health information technology is important because: 1) geographically we are a largely rural state, and 2) due in part to the large number of critical access and smaller hospitals (87) and number of certified rural health clinics (141) involved. The three important HIT areas for rural are: Electronic health records (EHR), telemedicine, and the state heath information exchange (HIE) program. Using HIT to drive improvements in healthcare in rural Iowa will require the support of many diverse stakeholders, and government agencies.

2009 survey of Iowa hospitals use of EHR.

(Source: IA Foundation for Medical Care)



SECTION ONE

RURAL FACTS AND HEALTH IMPLICATIONS

Initial statement - The Iowa Rural and Agricultural Health and Safety Plan (RAHSRP) focuses on the rural areas of Iowa. This section examines population data and geographic factors that influence health care and medical services. Depending on the federal source, the definition of rural is different when examining policy matters, or population, or culture, or land area. Due to this, areas determined rural for one reason are not necessarily rural for another. It can be revealing to understand how the definitions of rural result in designations that affect communities and the health of residents.

RURAL DEFINITIONS

What is Rural? - There are many definitions of 'rural' used within the context of health care programs and policies. Thus, any assessment of rural health should begin by defining what is meant by 'rural.' The two most common definitions are from: 1) the **Census Bureau's** census tract based definition, and 2) the **Office of Management and Budget's** (OMB) county-based definition.

According to official **U.S. Census Bureau** definitions, rural areas comprise open country and settlements with fewer than 2,500 residents. Urban areas comprise larger places and densely settled areas around them. Approximately 50 million Americans live in nonmetropolitan (nonmetro) areas. The nonmetro classification covers 2,000 counties outside the primary daily commuting range of urbanized areas with 50,000 or more people [3].

The U.S. Office of Management and Budget (OMB)—*not the Census Bureau*— demographics and designations are for use by federal statistical agencies in collecting, tabulating, and publishing federal statistics.

Metropolitan, micropolitan and noncore statistical areas are geographic areas defined as:

- Metropolitan areas contains a core urban area of 50,000 or more population
- Micropolitan areas contains an urban core of at least 10,000 (but less than 50,000) population
- Noncore are all other areas

According to the OMB, **in Iowa** there are 20 counties that are part of metropolitan areas, 17 counties that are part of micropolitan areas and the remaining 62 counties are considered "noncore" counties.

Based on US Census and OMB definitions, Iowa is experiencing a reduction of geographically designated rural areas.

According to the recent U.S. Census Iowa's population is approximately 43 percent rural.
Source: USDA Economic Research Service http://www.ers.usda.gov/StateFacts/

Iowa Population:	Rural *	Urban *	Total
Year			
1980	1,485,545	1,428,263	2,913,808
1990	1,354,928	1,421,827	2,776,755
2000	1,362,732	1,563,592	2,926,324
2009 (latest estimates)	1,301,129	1,706,727	3,007,856

Changing Rural Demographics

Suburbanization continues to extend the economic influence of large cities and to blur urban and rural landscapes along their periphery. An interesting rural health caveat in county demographics is the sudden growth of suburban areas. An example of suburbanization in Iowa is Dallas County. Between 2000 and 2010 Dallas County had a population change of 62.3 percent from rural to urban. The eastern section of Dallas County is well developed with businesses and high value homes. However for residents in the western portion of the county life is much the same as it was in 1990 including access to local health care. Thus, it is important to acknowledge that some Iowa counties, whether metropolitan or nonmetropolitan, contain a combination of urban and rural populations.

Dallas County Courthouse, 1902, Adel Iowa
Photo by Calvin Beale posted at ERS/USDA website

Lost rural population

Population wise 43.3 percent of the Iowa is rural with 20 percent of the rural population involved in production agriculture. In Iowa there are 92,856 farms (3rd in the USA). Seventy seven Iowa counties lost population between 2000 and 2009 [4]. So-- while the number of counties geographically designated rural shrinks, also the number of persons living in rural areas is decreasing. There are several reasons for the decreasing population including the economy (lack of jobs), and lack of suitable housing.

States can further define population by density. Population density is number of person per square mile. As Iowa counties loose population it is possible, a few sparsely populated counties could be become classified as a frontier with a population density of 6 or fewer residents per square mile.

Iowa Population Density Estimates 9/2010				
Population Density Peer Group	**Count**	**Peer Group Definitions (Per Square mile)**	**Population Estimate**	**Percent of Population**
Urban	7	150 or more persons	1,236,534	41.14%
Semi-Urban	19	40-149 persons	811,614	27%
Dense Rural	48	20-39 persons	748,053	24.89%
Rural	25	6-19 persons	209,270	6.96%
All Iowa Counties	99	State Average: 53.8 persons	3,005,471	100%

Use of geographic and population data

The U.S. Census demographics and population data are utilized by the federal government to determine funding to states and counties. Census data is also used for research. OMB data is primarily used for policy purposes. *What does all this mean to rural health?* To be eligible for

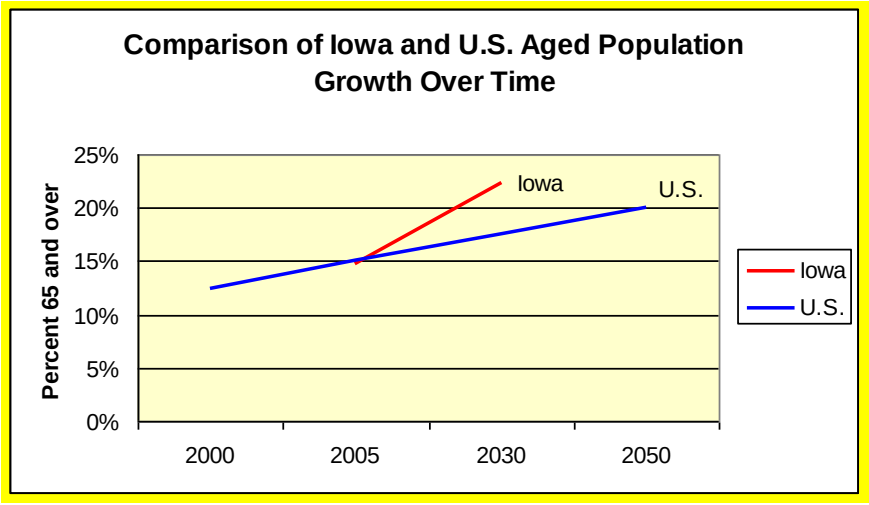
several rural federal health programs and funding opportunities, a health entity or an individual must reside or be located in an underserved, low income, rural area. Thus as counties are re-designated from rural to metro, there may be a loss of funds and resources

Examples of Iowa Rural Demographics (4)

Population characteristics such as age, occupation, gender, health status, and income level can determine factors which influence morbidity and mortality. These characteristics when factored in with lack of access to medical care contribute to health disparities in rural communities. Iowa's racial makeup is less diverse than the Nation. Iowa's largest minority group is the Hispanic population. Iowa's second largest minority group is the black population, which includes persons whose race was black alone or black in combination with any other race. Non-Hispanic white residents represent the majority population group in Iowa. Hispanic workforce is a major contributor to farm and agricultural related industries [5].

Age - Iowa's population is among the oldest in the nation. In 2005, 14.7 percent of Iowans were age 65 and over. In 2009, 17 percent of those age 65 and over lived in rural counties**.** It is projected that persons age 65+ living in rural areas will grow to 22.4 percent of the state's total population by the year 2030.6 (See Table 1.) **Iowa's percentage increase in population age 65 and over will happen two decades faster than the rest of the nation [6].**

Table 1



Source: The Future of Iowa's Health and Long-Term Care Workforce 2007

Income – Per capita income and earnings per job are often indicators of ability to acquire health insurance, access medical care, and participate in safety and disease prevention interventions. In Iowa per capita income and earnings are lower for rural than urban populations. Fortunately Iowa does not have high-poverty levels (20 percent of population) experienced in the southern regions of the nation. However, we do have counties that have persistent high poverty compared to the state rate which is 11.28 percent.

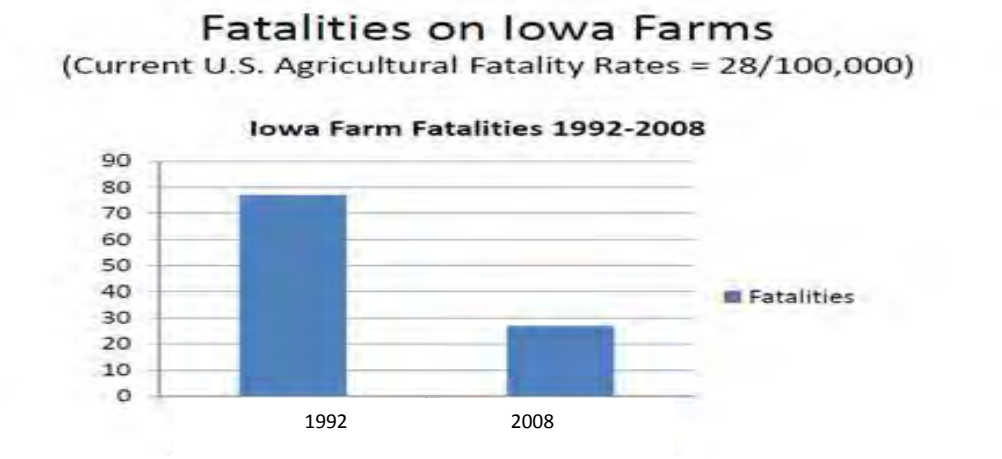
Iowa Income Facts			
	Rural *	Urban *	Total
Per-capita income (2008 dollars)			
2007	33,179	37,782	35,755
2008	35,595	38,991	37,509
Percent change	3.3	-0.6	1
Earnings per job (2008 dollars)			
2007	36,907	41,771	41,771
2008	37,708	41,850	41,850
Percent change	2.2	0.2	0.2

Source USDA Economic Research Service http://www.ers.usda.gov/StateFacts/

Health Status - Obesity and Overweight **–** The Iowans Fit for Life program released a notice of "Obesity in Iowa: A Statewide Epidemic". According to data in 2006, 1.4 million Iowans were overweight or obese. The number of Iowa adults (≥ 18 years of age) who are overweight or obese has increased by 36 percent over the last ten years. The national median prevalence rate is 32 percent. Obesity and overweight is one of Centers for Disease Control and Prevention (CDC) 10 health indicators. Obesity is costly. It reduces productivity and increases risk for chronic disease and death, and it drives up medical expenses [7]. A comprehensive review of several studies that examine nutrition, physical activity and activity in rural area found rural residents generally fare worse that their urban counterparts in regards to obesity, which is the opposite of the situation that existed prior to 1980 [8].

Work Injury and Death – Agriculture is one of the most hazardous industries in the United States, with 2008 rate of 30.4 deaths per 100,000 workers [9]. That compares to a rate of 3.7 deaths per 100,000 workers in all industries. **In Iowa** over the past 5 years, an average of 87 workers died each year due to work-related injuries. Roughly 30 percent of those work-related deaths were related to agriculture, accounting for 27 of 90 deaths in 2008 and 24 of 89 deaths

in 2007. Iowa has seen a noticeable decrease in farm related fatalities. However, it still has higher rates than the other states in our mid-west region.



1992 - 96,543 (77 fatalities, or 1 fatality per 1,254 farms)
2008 - 92,600 (27 fatalities, or 1 fatality per 3,430 farms)
Source: Iowa's Center for Agricultural Safety and Health
June 2010

Summary

Several demographic trends are reshaping economic and social conditions across nonmetro/rural counties. The trends serve as key indicators of rural health, and as generators of growth and economic expansion. The definition for rural depends on the topic and the issue it is related to, and the definition source. Geographic and census data are a tool to determine policy and funding. Although the word rural is commonly substituted for nonmetro in speech and writing, it is becoming increasingly misleading especially as related to health matters.

Comment

Residents living in non-metro areas and on farms and in the rural areas of metropolitan statistical areas have distinct health and safety needs related to their environment, vocation, culture and economic status. Decreased access to local medical care, preventive health services and rapid EMS transport are impeding factors to health and quality of life. Communities and residents of these rural areas will best benefit from policy, funding and health programs that recognize their unique status. Additionally, rural residents are in need of science- based interventions for solutions to increase their health and safety.

GEOGRAPHIC DESIGNATIONS

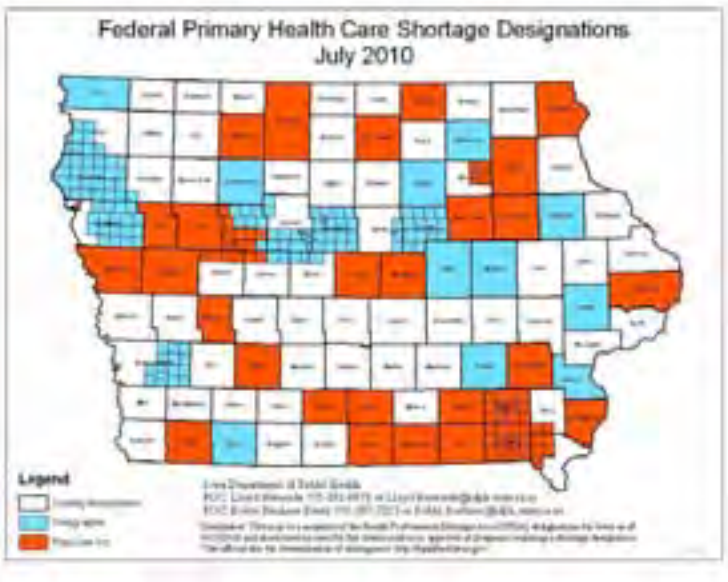
Initial Statement – This important section covers federal and state processes as they relate to designations that target resources to areas of need.

In addition to population data from the U.S. Census Bureau and the Office of Management and Budget, the Health Resources and Services Administration (HRSA) is responsible for ***a process to designate areas as having a shortage of health care professionals. This designation allows areas to be eligible for several federal programs tied to enhanced reimbursements, funding and loan repayment, among others***. . The HRSA Shortage Designation Branch (SDB) develops shortage designation criteria and uses them to decide whether or not a geographic area, population group or facility is a Health Professional Shortage Area (HPSA), or Medically Underserved Area (MUA) or Population (MUP). HPSAs may be designated as having a shortage of: 1) primary medical care, 2) dental or, 3) mental health providers. The Health Professional Shortage Area (HPSA) designation is one factor used to determine eligibility for a number of programs that improve access to health care, such as the National Health Service Corps, Loan Repayment Program, and Conrad State 30 Program. Medicare also makes bonus payments to primary medical care physicians and psychiatrists working in certain types of HPSAs.

In Iowa the Primary Care Office (PCO) within the Iowa Department of Public is responsible for analyzing areas of the state for HPSA eligibility. Areas may be urban or rural, population groups or medical or other public facilities. If the area meets the designation criteria, the PCO submits a request to HRSA SDB to designate the area as a HPSA. The PCO is required to re-analyze that HPSA every four years. The two other types of shortage designations are Medically Underserved Areas (MUAs) and Medically Underserved Populations (MUPs). These designations are maintained into perpetuity unless the PCO re-analyzes the area and requests de-designation.

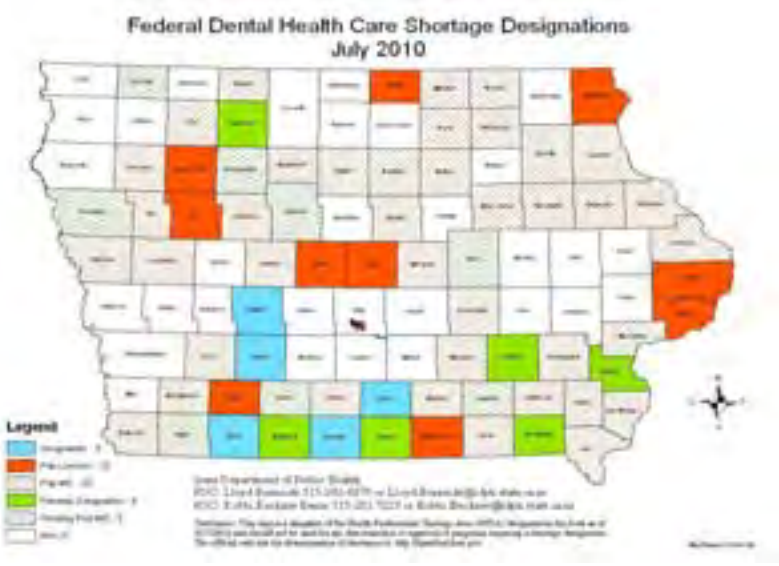
Primary Care Health Professional Shortage Areas

Iowa's primary care HPSAs consist of whole-county designations, groupings of townships or census tracts within a singular county, and groupings of townships or census tracts across counties. Currently, 54 counties in Iowa are fully or partially designated as primary care HPSAs. The PCO has a contract with the University of Iowa Office Statewide Clinical Educations Programs (OSCEP) which supplies reliable data on numbers and practice locations for primary care physician. Iowa primary care HPSA designations are as of July, 2010.



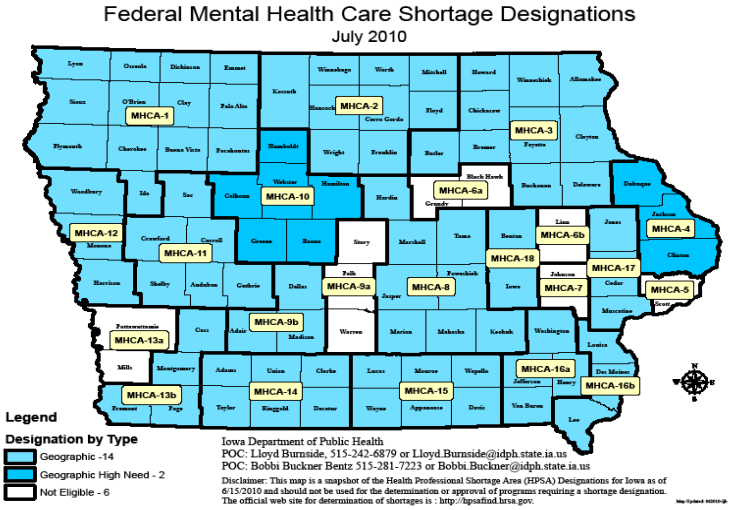
Dental Health Professional Shortage Areas

Iowa's dental health HPSAs, are all whole-county HPSAs except for one small HPSA in the Des Moines metropolitan area that is only a portion of Polk County. Currently, 62 counties in Iowa are entirely or partially designated as a dental HPSA. Once an area is designated as a dental health care HPSA, the PCO is required to reanalyze that area every four years. Iowa dental HPSA designations are as of July, 2010.



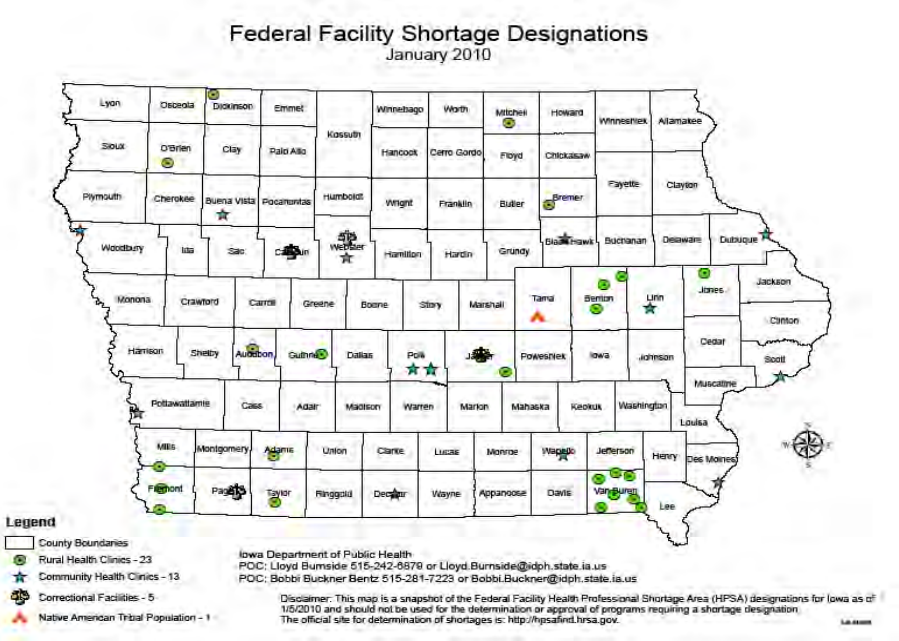
Mental Health HPSAs

Iowa's mental health HPSAs are comprised of groupings of counties referred to as "mental health catchment areas". Currently, all but 9 counties in Iowa are designated as mental health HPSAs. The PCO submits a request to HRSA to designate an area as a mental health HPSA when a catchment area has a population-to-psychiatrist ratio greater than 30,000 residents to 1 psychiatrist. If the area has high needs, defined by having high poverty OR high youth ratio OR high elderly ratio OR high substance abuse prevalence, then the area may qualify at a 20:000:1 ratio. Once an area is designated as a mental health care HPSA, the PCO is required to reanalyze that area every four years. Iowa mental health care HPSA designations are as of July, 2010.



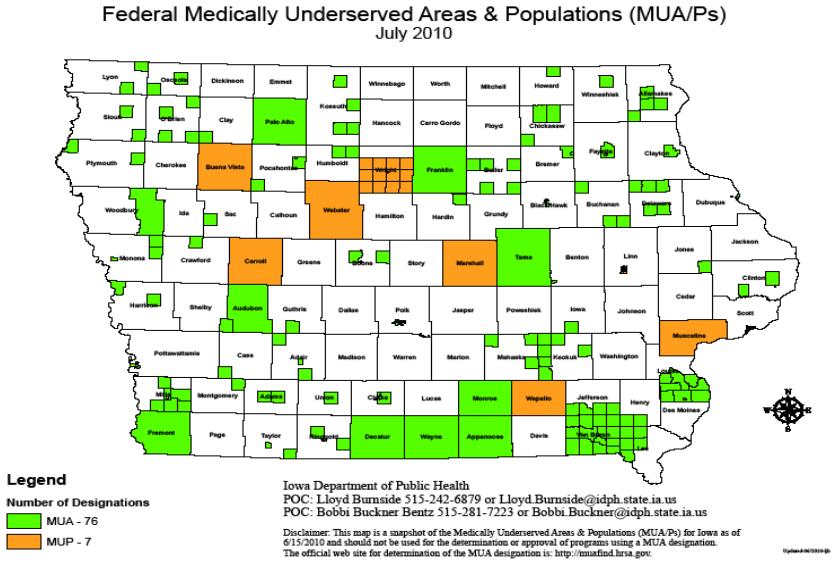
Facility HPSAs and Automatic HPSAs

The PCO can analyze specific facilities for shortage designations. These include federal and state correctional institutions, some public or non-profit private facilities, and state and county mental hospitals. Additionally, HRSA has provisions to provide Federally Qualified Health Centers (FQHC) and certified Rural Health Clinics with "automatic" HPSA designations as facilities that provide care to a large number of underserved patients. Currently, five correctional facilities in Iowa have facility designations. Thirteen FQHCS and 23 Rural Health Clinics have automatic HPSAs. Iowa facility and automatic HPSA designations are as of January, 2010.



Medically Underserved Areas and Medically Underserved Populations

Iowa's Medically Underserved Area and Medically Underserved Population designations are a mixture of whole-county and partial county designations. The PCO submits a request to HRSA to designate an area as an MUA or MUP when the area meets HRSA guidelines by using a specific mathematical formula that scores geographic areas on four criteria: 1) percentage of population below poverty, 2) percentage of population over age 65, 3) infant mortality rate, and 4) primary care physicians per 1,000 population. Iowa MUAs and MUPs are as of January, 2010.



Iowa Governor's Designation for Rural Health Clinic Eligibility

In addition to the national eligibility criteria for Rural Health Clinic (RHC) designation, Iowa is one of thirteen states that utilize a Governor's shortage designation process to identify counties for eligibility to allow for certification of Rural Health Clinics. **In Iowa** the Governor's designation process was first approved in 1998 by the Health Resources and Services Administration (HRSA) Shortage Designation Branch. This process ensures RHC status for counties which would not otherwise be eligible or would lose their clinic eligibility status. The latest designation occurred in 2009 and will remain in effect for four years. Information about the process for IA Governor's Designation for Rural Health Clinics can be located at the Iowa State Office of Rural Health website http://www.idph.state.ia.us/hpcdp/rural_health.asp.

TABLE 1: Federal and State Programs requiring shortage designation

Shortage Designation	J-1 Visa Waiver	National Health Service Corps	State PRIMECARRE Loan Repayment Program	Federally Qualified Health Center	Rural Health Clinic	Medical Bonus Payment	State Mental Health Shortage Area Program
Primary Care HPSA							
• Geographic HPSA	√	√	√		√	√	
• Population HPSA	√	√					
Dental HPSA							
• Geographic HPSA		√	√				
• Population HPSA		√	√				
• Mental Health HPSA							
• Geographic HPSA	√	√	√				√
Medically Underserved Area	√			√	√		
Medically Underserved Population	√			√			
Governor's HPSA					√		
Automatic & Facility HPSA RHC, FQHC, & Correctional Facilities)	√	√	√	**NA**	**NA**	**NA**	**NA**

Source: Iowa Dept of Public Health - Rural Health and Primary Care Annual Report 2010

The future of HPSAs – The Heath Resources and Services Administration (HRSA) responded to Section 5602 of Public Law 111-14B of the Patient Protection and Affordable Care Act requiring a revised comprehensive methodology and criteria for designation of MUPs and Primary Care HPSAs. HRSA established a Negotiated Rulemaking Committee comprised of 28 members who are key stakeholders representing the programs most affected by the designations, including health centers, rural health clinics and other rural providers, special populations with unique health care needs, and technical experts in health care access and statistical methods. The committee convened in September of 2010 and is expected to have draft recommendations in the summer of 2011.

Federal and State Designation of Rural Hospitals

In addition to primary care, mental health, and dental care facilities, rural hospitals are subject to specific criteria based on geographic location and other factors. The criterion determines their designation as a "rural hospital" and affects funding and reimbursement levels.

One type of "rural hospital" is the Critical Access Hospital (CAH). The CAH classification was created by the Balanced Budget Act of 1997 and modified by Balanced Budget Refinement Act of 1999 and the Medicare Modernization Act of 2003. CAH designation allows the hospital to receive Medicare reimbursement on a cost-basis at 101percent of reasonable costs for inpatient and outpatient services (including lab and qualifying ambulance services). To be classified as a CAH, a rural hospital must meet the following requirements:

- The hospital must be located more than 35 miles from another hospital;
- The number of inpatient acute care beds cannot exceed 25; (Rehabilitation and psychiatric beds are excluded from this calculation.)
- The average length of stay for acute care patients must be less than 96 hours;
- 24-hour emergency care services must be provided; and
- The hospital must develop agreements with other hospitals related to credentialing and patient referral and transfer.

Prior to 2006, hospitals could avoid the 35 mile requirement if the hospital was deemed a necessary provider. Federal law permitted the states to establish their own criteria for the necessary provider requirement. **In Iowa**, this criterion required the hospital to have certain population, geographic and facility characteristics. The hospital was also required to demonstrate its importance to the community's health status and its involvement within the community. The Iowa Department of Public Health Medicare Rural Hospital Flexibility (FLEX) program reviewed and assisted in evaluating the applications for hospitals seeking such classification. On January 1, 2006, the necessary provider exception was eliminated. All of Iowa's 82 CAHs, however, received necessary provider classification prior to this time.

Summary

Geographic and population statistics are utilized to develop methods and process for health related designations. It is important to note some HPSAs may need more resources than others. The designations determine access to health care, federal and state funding and reimbursements levels. Congress understands the significance of these designations and thus the Patient Protection Affordable Care Act included a mandate for review and revision of the HPSA system.

Comment

Resources are needed to increase and sustain the number of rural primary care providers and other medical professionals in high-risk, underserved areas. One identified barrier to rural practice is provider lost income (compared to practicing in an urban area). By utilizing the upcoming revised HPSA designations federal and state funding can reduce financial barriers to care in all rural primary care HPSAs through increased eligibility for loan repayments, technical assistance and reimbursements. Increased Rural Health Clinic and Federally Qualified Health Clinic designations would promote primary care workforce in rural locations with greatest need [10].

SECTION TWO

ACCESS TO HEATLH SERVICES

Initial Statement - There are numerous issues affecting access to health care in rural Iowa. Most of the barriers mirror the health care access challenges reported throughout the nation's rural areas. However since 90 percent of the land mass in Iowa is considered rural and in production agriculture, and half of the population live in what is considered a rural area, the issue of health care access is more evident in Iowa.

Rural Health Care Access - There are 62 million Americans currently residing in rural areas. It is estimated that 20 percent of the rural population is uninsured, and this number is projected to increase to 25 percent by 2019. While 20 percent of the U.S. population lives in rural areas, only 9 percent of physicians practice in rural settings. The need for increased access to care and insurance coverage is especially crucial for rural populations. They receive less preventive care and have higher rates of all chronic diseases than their urban counterparts [11].

Iowa is the stereotypical rural environment. Agriculture and ag-related businesses make up the majority of the state's economic base. Iowa's rural populations have similar characteristics to other rural states in the nation: older populations, lower incomes, and seasonal unemployment above regional averages. Despite those characteristics, rural populations demonstrate greater satisfaction with life, increased engagement and connectedness within their communities and, fewer impacts from impoverishment or unemployment because of community support systems. Rural environments do however offer significant health access challenges for their populations. Several recent studies have pointed out some of these challenges. Summaries of those reports are detailed throughout this section.

Section Two focuses on two specific heath access topics~~:~~ **1) transportation, and 2) rural community development.** To briefly summarize---rural areas that have public transportation systems, and economically effective, health conscious communities are more likely to have adequate access to quality health care.

Transportation

Iowa is served by 35 public transit systems that provide local transit services open to the public in all parts of the state. There are 19 urban public transit systems and 16 regional public transit systems. Urban systems provide scheduled route service and ADA paratransit service in larger Iowa communities. Most regional systems offer demand responsive transit services over a multi-county area outside the larger communities. Transit systems work with human service agencies~~,~~ and others~~,~~ to provide coordinated service for transportation in their areas. Public transportation ridership is at record highs. Due to the economic downturn and job loss, families are looking for ways to cut household costs and public transportation is one solution. Public transportation has increased 38 percent since 1995 — nearly triples the growth rate of the population of the United States. However, the recent economic downturn also impacted the transportation industry, and it has been a fiscal challenge for transit agencies to maintain services. Transit service in metro areas often includes riders from nearby rural communities. **In Iowa,** 31 percent of the population age 16 and older does not have a driver's license. As Iowa experiences a higher than national growth rate in population age 65 and over, more elderly will rely on public transportation—this is especially true in rural areas [12] .

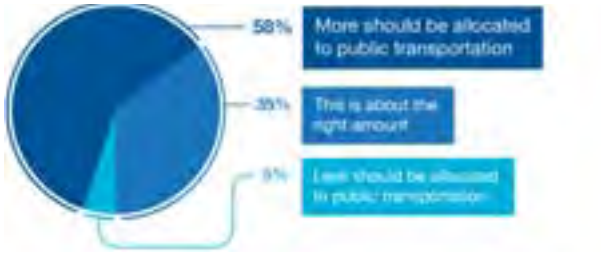
National Survey

More than four-in-five voters (82 percent) say that "the United States would benefit from an expanded and improved transportation system, such as rail and buses," and a solid majority (56 percent) "strongly agree" with that statement. This is a widely held view with overwhelming majorities of voters in every region of the country and in every type of community. **Fully 79 percent of rural voters** agreed with the statement, despite much lower use of public transportation compared to Americans in urban areas.

Transportation for America

Allocations of Federal Transportation Spending

Future of Transportation National Survey



Methodology: A national telephone survey of 800 registered voters, including 700 landline interviews and 100 cell phone interviews. The survey was conducted February-March 2010, and has a margin of error ± 3.46%].
SOURCE: Future of Transportation

In Iowa, there is a strong infrastructure of primary and secondary roads based on a historical emphasis of farm to market routes. The majority of the population in Iowa uses private automobiles to access health care and other community services. The 2009 population estimate for all Iowans was just under 3 million people, and for ages 18 to 64 it was 1,838,195. In 2009, 1,600,012 automobiles were registered in Iowa, making the ratio of Iowans to cars approximately 2:1. Despite a large network of roadways and heavy utilization of personal vehicles, inadequate transportation has long been identified as a major issue in rural Iowa where 43.6 percent of Iowans live and 21.5 percent of rural Iowans are over the age of 65 [13].

Iowa legislative history: In 1976, the State of Iowa passed a coordination law in response to transit financial problems in Johnson and Wapello counties (Chapter 601J). This law required all public funds spent on transit to be expended in conformance with the state transportation plan. Then, in 1984, the coordination law was rewritten to include penalties for failure to coordinate. In 2006, the safe Accountable Flexible Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) Federal Register Notice stated: "*Recipients of federal transit funds shall certify that the projects come from a locally developed coordinated public transit/human services transportation plan. The plan development should include representatives of public, private, and nonprofit transportation and human services providers and participation by the public."*

Iowa Code section 324A states all agencies spending public funds for the provision of passenger transportation services, other than public school transportation, must coordinate funding and the services with the public transit system in their area. The intent was that the funds would be spent more effectively and the benefits of public spending would reach all Iowans. To assist in this coordination, a State Level Transportation Coordination Council was formed in 1991[14].

In Iowa, the Iowa Farm and Rural Life Poll is an annual University of Iowa survey that collects and disseminates information on issues of importance to rural communities across Iowa and the Midwest. The recent poll considered miles traveled for goods and services (one-way). The average was 17 miles to a hospital and 13 miles to a physician. However, this means around half need to travel longer distances, and some much further. Ten percent of participants report the closest hospital is 30 miles [15].

One solution –the Iowa Human Services Transportation Advisory Group provided input on locally developed coordinated public transportation plans. Through the mobility management system, the paradigm shifts transitions to establishing a transit delivery network to achieve connectivity for customers needing mobility. Mobility managers and coordinators seek to utilize all forms of transportation: public transit, volunteer transportation programs and for-profit transportation to transport groups. One example is:

Mobility managers: 1) established an inventory of existing transportation programs and providers, and built relationships with human service and transportation providers. 2) Provided train-the-trainer opportunities to agencies and businesses in eastern Iowa, and 3) developed travel training curriculum to educate new transit riders, including seniors who are ready to transition from driving [16].

Summary

Individuals who have access to a personal automobile may still have a barrier to reaching health care facilities or providers. These drivers may not feel comfortable driving outside their town. Being able to and feeling comfortable to drive has greater health implications as it limits access to jobs, nutrition, and other community services, and reduces involvement in social activities. The fact is a significant segment of the rural population depends on family members, public transit and/or volunteer efforts to access health care and social services.

Comment

Research indicates that nearly 40 percent of all rural residents live in areas with no public transportation, and another 28 percent live in areas with limited levels of service. Enhancing transportation opportunities and options for rural residents can improve economic growth and community development that will ensure quality of life for residents in rural environments.

Rural Community Development

Initial Statement – A significant challenge for rural health care is the lack of an adequate workforce. Health care providers and health organizations choose to establish a practice in communities that are vital, hold economic promise, and that are supportive of health care establishments. Community development is an investment in health.

A recurring theme proclaims that successful communities are built; they are not born. To ensure that a quality living environment exists in rural America, residents must be empowered to effect change within their communities. Community development and sustainment must encompasses a broad mix of talents and tasks regarding business development, infrastructure improvements, city planning, environmental concerns and social institutions and engaged residents. Community development also needs to include the promise of a healthy community.

Standard Elements in Community Development

Community development includes aspects of community capacity building, citizen participation, consensus building, problem solving, visioning and action planning. Partnerships among private, public and nonprofit entities are created to promote activities supporting community development. These activities might be housing construction, business development, technology initiatives, cooperative development or rehabilitation of structures, to name just a few.

Community economic development is the capacity of the local state to continue generating income and employment to maintain, if not to improve its relative economic position. Observations of growing, stable, and declining communities lead to the conclusion that the institutional apparatus is critical. Vital communities possess social constructions, with underlying assumptions, which encourage and permit the orderly and efficient use of economic resources, ensure their maintenance, and allow adaptation to changes in the environment [17].

Ongoing community development including structures, businesses and public safety infrastructure can bend the outward migration of young families. Typically, rural communities lose young people who seek further education and job establishment. However, families and elderly/retirees tend to stay in the communities that are involved in community development.

To support and sustain Iowa farm families, rural areas still need a town nearby with schools, food, fuel, health care, a community structure, and religious centers.

Photo Source: John Cromartie, USDA/ERS

Rural Community Study by Iowa State University, Sociology Department

Traditionally, small towns have served as the cultural and socioeconomic hub for Iowa's rural residents. In recent years, due to a variety of circumstances, the survival of many of Iowa's rural communities is in question. Declines in the number of farms and businesses have contributed to a steady out-migration of residents, leaving fewer individuals to address an increasing number of problems. Recognizing the significance of small towns to Iowa's past and present, a major research effort was initiated in 1994 to assess the social conditions in Iowa's small towns. The purpose of this project, called the Rural Development Initiative (RDI), was to provide data that would improve the basis for policy decisions to stimulate rural development and community vitality. This research focused on three main areas: community quality of life, the local social environment, and community involvement.

An RDI survey of 10,000 Iowans living in small towns was completed in 1994 and 2004. The following are some of the identified changes:

- Community population continue to decline
- Percent of residents over 65 years of age dropped from 23.2 to 21.4
- Median income went from $22,811 in 1994 to $34,593 in 2004.
- Unemployment dropped from 5.1 to 4.1 percent as did the poverty rates (11.55 down to 8 percent)
- Over 70 percent rated their quality of life good or very good along with community services like fire and garbage collection, schools and water and parks.
- Access to services satisfaction was high for worship/churches (71 percent) but low for access to primary health care (36 percent), shopping (43 percent) or recreation (25 percent)

- Iowans feel their town is friendly, safe, tolerant and open to new ideas. Most (81 percent) feel content to live in their town and would be sorry if they had to move away.
- There was a high level of trust and engagement with people from their community; most were part of some community committees or activities.

Survey summary: Over the decade, most small Iowa towns experienced some economic "shock" of some kind – usually it related to businesses and most often to businesses closing or downsizing. Almost one-third of the time the shock was negative but for over sixty-eight percent the change was positive.

Community Development Solutions

"The U.S. Department of Agriculture (USDA) has a long history of redressing problems of attention to remoteness and small size communities. In 2010**,** USDA Rural Development Invested $801 Million in rural Iowa. "Funds issued through USDA programs helped create or retain more than 2,200 jobs in rural Iowa, aided 2,489 families in buying their own homes and assisted more than 250 rural Iowa communities in improving community facilities and upgrading local infrastructure [18]."

USDA Rural Development also invested $165 million through its business programs to promote economic growth in rural Iowa. More than 30 businesses in rural Iowa accessed $110 million in guaranteed loan funds through USDA Rural Development during the past year. Funds from the Recovery Act played a big role in assisting many of these guaranteed loans.

Iowa continues to be a leader in using USDA loan and grant programs to help with renewable energy production and energy-efficiency improvements. This past year, 561 producers and businesses in Iowa received $44 million from the agency's Rural Energy for America Program (REAP). This program provides financial assistance to help farmers and business owners make energy-efficiency improvements, as well as install renewable energy systems such as wind turbines, geothermal and solar.

Supporting healthcare in rural Iowa continues to be an Iowa USDA priority. Since 2005, USDA Rural Development has awarded $273 million to 77 hospitals, rehabilitation centers, healthcare office buildings, clinics, mental health facilities, nursing homes and assisted living centers in Iowa to help improve, expand or build new facilities.

Iowa small hospital project - USDA Rural Development awarded a total of $24 million to assist with a large hospital expansion and renovation project at the Belmond Medical Center, including a $21.6 million direct loan made possible by the Recovery Act. Additionally, a $2.4 million guaranteed loan was provided to First State Bank in Belmond on a loan for the hospital. The 22-bed critical access hospital was built in 1952 is no longer large enough to meet the healthcare needs of area residents. When completed, the hospital will add 55,000 square-feet and include a new hospital entrance, emergency room, surgery area, acute-care area, therapy area and helicopter stop. The remodeling will add additional clinic, specialty clinic and office space. The new addition is expected to be completed by November 2011 and the remodeling finished by May 2012. (Source: IA USDA announcement)

Healthy Communities

Rural health access to care and services – a statement from Healthy Rural People 2020.
"There are 62 million Americans currently residing in rural areas. It is estimated that 20 percent of the rural population is uninsured, and this number is projected to increase to 25 percent by 2019. The need for increased access to care and insurance coverage is especially crucial for rural populations because they receive less preventive care and have higher rates of all chronic diseases than their urban counterparts (Bailey, 2010). Out of the millions of rural residents living in the United States, 17 percent are minorities. In general, minorities have poorer health and higher rates of serious diseases such as stroke, HIV/AIDS and certain types of cancer", (McKenzie & Bushy, 2004). A national survey places access to quality health services as the top-ranking priority among rural health care stakeholders and leaders. Unfortunately, this is also one of the hardest obstacles to overcome in rural areas due to lack of health care providers and limited or no health insurance coverage for rural residents (Nelson & Gingrich, 2010).

The information above is a catalyst for rural community planners, leaders, and partners to better understand the value of including health components to community development or improvement. Designing environmental assets to include bike and walkways, parks with play equipment for children and exercise equipment for adults is a dynamic strategy to increase activity levels of residents and helping to resolve the critical issue of obesity in Iowa.

Healthy Community Development

According to IDPH Office of Healthy Communities director, "*The healthy community approach allows communities to change focus and do things that have more value to the community culture and its people. For example, the community might be better served if the goal to build a new wellness center was converted to a school-community contract to make the gym, track and exercise equipment open to the public. Also, the community approach might demonstrate using very scarce resources to develop a basic health service might be better served by investing in Cracker Jack emergency and transportation systems* [19]*."*

Iowa Department of Public Health - Iowa's Healthy Communities program experiment created Community Wellness Grants and offered them to over sixty Iowa communities. These community empowerment projects produce trails, wellness centers and gathered community planners for health education courses and school nutrition change. The grant funding catalyzed community engagement for health improvement changes at the same time building leadership and the community capacity to move their initiatives forward. The lessons learned from this work demonstrated that success and sustainability came from strong local leadership, committed community coalitions and purposeful planning and policy implementation. These type projects can be vital to smaller rural communities.

Summary

Health care access is directly related to economic and structural community development. Rural areas rely heavily on government programs and funding to improve and sustain infrastructure and public access. There have been several beneficial economic and health related community projects in rural communities. For farm families and those from remote residential areas—having a home town nearby that offers some of the necessary services and supplies is critical. Many rural communities are not expecting to grow in population or size; rather, they just want to sustain and to have a safe, healthy town.

Comment

To reduce the costs related to disease and illness, it is critical that rural communities in Iowa have access to community development dollars and expertise. State and federal programs that improve and sustain community infrastructure, and initiatives that nurture healthy community environments are vital to prevent illness and to ensure individuals with chronic diseases stay as well as possible.